HCT lorries (High Capacity Transport)

Heavy-duty vehicles can increase the efficiency of timber transport and reduce emissions to the environment.

Transportation costs are the most costly part of wood mobilization especially in sparsely populated areas with long distances. The distance between forest and factory can be over 500 kilometers. To reduce costs of long-distance transportation of wood, bigger lorries were innovated and are now tested in Finland in a research project. The environmental effects and traffic safety are also explored.

Full utilization of HCT vehicles requires maintenance of road networks including forest roads, main roads, and bridges.

The 33-metric vehicle combination is able to carry even 70 tons of wood. The vehicle consumes less fuel than the smaller one and therefore contributes to reducing the environmental effects of transportation. The vehicles will also contribute to traffic safety since fewer vehicles will be needed to wood transportation in the future.

The research project is participated by experienced research institutes: Aalto University, Oulu University, Metsäteho, and Tampere Technical University. In the research project, the impacts on the road as well as the features of the lorries are investigated: braking distances, passing capacity, oscillations of the vehicle, and curve driving. The consumption of fuel, emissions, and durability of tires are also focused on.

Cost efficiency is gained in long-distance transportation of wood. The HCT vehicles reduce transportation costs and carbon emissions.

The first combination to transport wood started shipping with a pilot permit in December 2020.

PODROBNOSTI

IZVOR LESA

Gozd

TIP LESA

Okrogli les

VRSTA OBRAVNAVANEGA LESA

Stemwood

VPLIV NA OKOLJE IN BIODIVERZITETO

Reduces carbon emissions, consumes less fuel than smaller vehicles

VPLIV NA PRIHODKE

Positive

POTENCIAL IZKORIŠČANJA

--

VOZLIŠČE

Severno vozlišče

GOSPODARSKI VPLIV

Less transportation costs, positive effect to climate change

POTREBNO SPECIFIČNO ZNANJE

Skills to handle bigger vehicles

POTENCIAL ZA MOBILIZACIJO

High

TRAJNOST - VREDNOST

--

ENOSTAVNOST IZVEDBE

Easy

ENOSTAVNOST IZVEDBE - OCENJEVANJE

--

KLJUČNI PREDPOGOJI

Involvement of relevant stakeholder, incl. traffic bureau and other authorities

VRSTA DOGODKA, NA KATEREM JE BIL PREDSTAVLJEN TA BPI

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VPLIV NA DELOVNA MESTA

Positive

STROŠKI IZVEDBE (EURO - €)

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VEČ PODROBNOSTI

IZZIV	DOMENA	TIP REŠITVE
5. Izboljšanje gospodarske in ekološke učinkovitosti gozdne oskrbovalne verige	Sečnja in spravilo, infrastruktura, logistika	--

KLJUČNE BESEDE	DIGITALNE REŠITVE	INOVACIJA
--	No	Ne

IZVORNA DRŽAVA	OBSEG UPORABE	ZAČETNO IN KONČNO LETO
Finska	Regionalni	2015 - 2019

KONTAKTN PODATKI

LASTNIK OZ. AVTOR

Metsähallitus

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POROČEVALEC

REFERENCES AND RESOURCES

SPLETNA STRAN

http://www.e-julkaisu.fi/metsahallitus/autoesite/

SPLETNA STRAN PROJEKTA

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REFERENCA PROJEKTA

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VIRI

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PROJEKT, V OKVIRU KATEREGA SO BILI ZBRANI OSNOVNI PODATKI

Rosewood

DATUM OBJAVE

17 Sep 2019

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Link to Rosewood 4.0

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